

#2

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/528,104  
Source: PCT  
Date Processed by STIC: 3-25-05

# ENTERED



PCT

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US/10/528,104**

DATE: 03/25/2005  
TIME: 09:22:35

Input Set : A:\PTO.SR.txt  
Output Set: N:\CRF4\03252005\J528104.raw

3 <110> APPLICANT: G2M Cancer Drugs AG  
 4 Forschungszentrum Karlsruhe GmbH  
 6 <120> TITLE OF INVENTION: The use of molecular markers for the preclinical and  
 clinical profiling  
 7 of inhibitors of enzymes having histone deacetylase activity  
 9 <130> FILE REFERENCE: molecular markers  
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/528,104  
 C--> 11 <141> CURRENT FILING DATE: 2005-03-16  
 11 <160> NUMBER OF SEQ ID NOS: 8  
 13 <170> SOFTWARE: PatentIn version 3.1  
 15 <210> SEQ ID NO: 1  
 16 <211> LENGTH: 488  
 17 <212> TYPE: PRT  
 18 <213> ORGANISM: homo sapiens  
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 23 1 5 10 15  
 26 Asp Gly Asp Ile Gly Asn Tyr Tyr Gly Gln Gly His Pro Met Lys  
 27 20 25 30  
 30 Pro His Arg Ile Arg Met Thr His Asn Leu Leu Leu Asn Tyr Gly Leu  
 31 35 40 45  
 34 Tyr Arg Lys Met Glu Ile Tyr Arg Pro His Lys Ala Thr Ala Glu Glu  
 35 50 55 60  
 38 Met Thr Lys Tyr His Ser Asp Glu Tyr Ile Lys Phe Leu Arg Ser Ile  
 39 65 70 75 80  
 42 Arg Pro Asp Asn Met Ser Glu Tyr Ser Lys Gln Met His Ile Phe Asn  
 43 85 90 95  
 46 Val Gly Glu Asp Cys Pro Ala Phe Asp Gly Leu Phe Glu Phe Cys Gln  
 47 100 105 110  
 50 Leu Ser Thr Gly Gly Ser Val Ala Gly Ala Val Lys Leu Asn Arg Gln  
 51 115 120 125  
 54 Gln Thr Asp Met Ala Val Asn Trp Ala Gly Gly Leu His His Ala Lys  
 55 130 135 140  
 58 Lys Tyr Glu Ala Ser Gly Phe Cys Tyr Val Asn Asp Ile Val Leu Ala  
 59 145 150 155 160  
 62 Ile Leu Glu Leu Leu Lys Tyr His Gln Arg Val Leu Tyr Ile Asp Ile  
 63 165 170 175  
 66 Asp Ile His His Gly Asp Gly Val Glu Glu Ala Phe Tyr Thr Thr Asp  
 67 180 185 190  
 70 Arg Val Met Thr Val Ser Phe His Lys Tyr Gly Glu Tyr Phe Pro Gly  
 71 195 200 205  
 74 Thr Gly Asp Leu Arg Asp Ile Gly Ala Gly Lys Gly Lys Tyr Tyr Ala  
 75 210 215 220  
 78 Val Asn Phe Pro Met Cys Asp Gly Ile Asp Asp Glu Ser Tyr Gly Gln

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**Output Set: N:\CRF4\03252005\J528104.raw**

79	225	230	235	240
82	Ile Phe Lys Pro Ile Ile Ser Lys Val Met Glu Met Tyr Gln Pro Ser,			
83	245	250	255	
86	Ala Val Val Leu Gln Cys Gly Ala Asp Ser Leu Ser Gly Asp Arg Leu			
87	260	265	270	
90	Gly Cys Phe Asn Leu Thr Val Lys Gly His Ala Lys Cys Val Glu Val			
91	275	280	285	
94	Val Lys Thr Phe Asn Leu Pro Leu Leu Met Leu Gly Gly Gly Tyr			
95	290	295	300	
98	Thr Ile Arg Asn Val Ala Arg Cys Trp Thr Tyr Glu Thr Ala Val Ala			
99	305	310	315	320
102	Leu Asp Cys Glu Ile Pro Asn Glu Leu Pro Tyr Asn Asp Tyr Phe Glu			
103	325	330	335	
106	Tyr Phe Gly Pro Asp Phe Lys Leu His Ile Ser Pro Ser Asn Met Thr			
107	340	345	350	
110	Asn Gln Asn Thr Pro Glu Tyr Met Glu Lys Ile Lys Gln Arg Leu Phe			
111	355	360	365	
114	Glu Asn Leu Arg Met Leu Pro His Ala Pro Gly Val Gln Met Gln Ala			
115	370	375	380	
118	Ile Pro Glu Asp Ala Val His Glu Asp Ser Gly Asp Glu Asp Gly Glu			
119	385	390	395	400
122	Asp Pro Asp Lys Arg Ile Ser Ile Arg Ala Ser Asp Lys Arg Ile Ala			
123	405	410	415	
126	Cys Asp Glu Glu Phe Ser Asp Ser Glu Asp Glu Gly Glu Gly Arg			
127	420	425	430	
130	Arg Asn Val Ala Asp His Lys Lys Gly Ala Lys Lys Ala Arg Ile Glu			
131	435	440	445	
134	Glu Asp Lys Lys Glu Thr Glu Asp Lys Lys Thr Asp Val Lys Glu Glu			
135	450	455	460	
138	Asp Lys Ser Lys Asp Asn Ser Gly Glu Lys Thr Asp Thr Lys Gly Thr			
139	465	470	475	480
142	Lys Ser Glu Gln Leu Ser Asn Pro			
143	485			
146	<210> SEQ ID NO: 2			
147	<211> LENGTH: 183			
148	<212> TYPE: PRT			
149	<213> ORGANISM: homo sapiens			
151	<400> SEQUENCE: 2			
153	Met Ser Ser Pro Ser Pro Gly Lys Arg Arg Met Asp Thr Asp Val Val			
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157	Lys Leu Ile Glu Ser Lys His Glu Val Thr Ile Leu Gly Gly Leu Asn			
158	20	25	30	
161	Glu Phe Val Val Lys Phe Tyr Gly Pro Gln Gly Thr Pro Tyr Glu Gly			
162	35	40	45	
165	Gly Val Trp Lys Val Arg Val Asp Leu Pro Asp Lys Tyr Pro Phe Lys			
166	50	55	60	
169	Ser Pro Ser Ile Gly Phe Met Asn Lys Ile Phe His Pro Asn Ile Asp			
170	65	70	75	80
173	Glu Ala Ser Gly Thr Val Cys Leu Asp Val Ile Asn Gln Thr Trp Thr			

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174	85	90	95
177	Ala Leu Tyr Asp Leu Thr Asn Ile Phe Glu Ser Phe Leu Pro Gln Leu		
178	100	105	110
181	Leu Ala Tyr Pro Asn Pro Ile Asp Pro Leu Asn Gly Asp Ala Ala Ala		
182	115	120	125
185	Met Tyr Leu His Arg Pro Glu Glu Tyr Lys Gln Lys Ile Lys Glu Tyr		
186	130	135	140
189	Ile Gln Lys Tyr Ala Thr Glu Glu Ala Leu Lys Glu Gln Glu Glu Gly		
190	145	150	155
193	160	165	170
194	Thr Gly Asp Ser Ser Ser Glu Ser Ser Met Ser Asp Phe Ser Glu Asp		
197	175	180	
201	<210> SEQ ID NO: 3		
202	<211> LENGTH: 624		
203	<212> TYPE: PRT		
204	<213> ORGANISM: homo sapiens		
206	<400> SEQUENCE: 3		
208	Met Glu Asn Ser Asp Ser Asn Asp Lys Gly Ser Gly Asp Gln Ser Ala		
209	15	10	15
212	Ala Gln Arg Arg Ser Gln Met Asp Arg Leu Asp Arg Glu Glu Ala Phe		
213	20	25	30
216	Tyr Gln Phe Val Asn Asn Leu Ser Glu Glu Asp Tyr Arg Leu Met Arg		
217	35	40	45
220	Asp Asn Asn Leu Leu Gly Thr Pro Gly Glu Ser Thr Glu Glu Glu Leu		
221	50	55	60
224	Leu Arg Arg Leu Gln Gln Ile Lys Glu Gly Pro Pro Pro Gln Asn Ser		
225	65	70	75
228	80	85	90
229	Asp Glu Asn Arg Gly Asp Ser Ser Asp Asp Val Ser Asn Gly Asp		
232	95		
233	Ser Ile Ile Asp Trp Leu Asn Ser Val Arg Gln Thr Gly Asn Thr Thr		
236	100	105	110
237	Arg Ser Gly Gln Arg Gly Asn Gln Ser Trp Arg Ala Val Cys Arg Thr		
240	115	120	125
241	Asn Pro Asn Ser Gly Asn Phe Arg Phe Ser Leu Glu Ile Asn Val Tyr		
244	130	135	140
245	Ser Asn Asn Gly Ser Gln Asn Ser Glu Asn Glu Asn Glu Pro Ser Ala		
248	145	150	155
249	Arg Arg Ser Ser Gly Glu Asn Val Glu Asn Asn Ser Gln Arg Gln Val		
252	165	170	175
253	Glu Asn Pro Arg Ser Glu Ser Thr Ser Ala Arg Pro Ser Arg Ser Glu		
256	180	185	190
257	Arg Asn Ser Thr Glu Ala Leu Thr Glu Val Pro Pro Thr Arg Gly Gln		
260	195	200	205
261	Arg Arg Ala Arg Ser Arg Ser Pro Asp His Arg Arg Thr Arg Ala Arg		
264	210	215	220
265	Ala Glu Arg Ser Arg Ser Pro Leu His Pro Met Ser Glu Ile Pro Arg		
268	225	230	235
	Arg Ser His His Ser Ile Ser Ser Gln Thr Phe Glu His Pro Leu Val		240

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269	245	250	255
272	Asn Glu Thr Glu Gly Ser Ser Arg Thr Arg His His Val Thr Leu Arg		
273	260	265	270
276	Gln Gln Ile Ser Gly Pro Glu Leu Leu Ser Arg Gly Leu Phe Ala Ala		
277	275	280	285
280	Ser Gly Thr Arg Asn Ala Ser Gln Gly Ala Gly Ser Ser Asp Thr Ala		
281	290	295	300
284	Ala Ser Gly Glu Ser Thr Gly Ser Gly Gln Arg Pro Pro Thr Ile Val		
285	305	310	315
288	Leu Asp Leu Gln Val Arg Arg Val Arg Pro Gly Glu Tyr Arg Gln Arg		
289	325	330	335
292	Asp Ser Ile Ala Ser Arg Thr Arg Ser Arg Ser Gln Thr Pro Asn Asn		
293	340	345	350
296	Thr Val Thr Tyr Glu Ser Glu Arg Gly Gly Phe Arg Arg Thr Phe Ser		
297	355	360	365
300	Arg Ser Glu Arg Ala Gly Val Arg Thr Tyr Val Ser Thr Ile Arg Ile		
301	370	375	380
304	Pro Ile Arg Arg Ile Leu Asn Thr Gly Leu Ser Glu Thr Thr Ser Val		
305	385	390	395
308	Ala Ile Gln Thr Met Leu Arg Gln Ile Met Thr Gly Phe Gly Glu Leu		
309	405	410	415
312	Ser Tyr Phe Met Tyr Ser Asp Ser Asp Ser Glu Pro Thr Gly Ser Val		
313	420	425	430
316	Ser Asn Arg Asn Met Glu Arg Ala Glu Ser Arg Ser Gly Arg Gly Gly		
317	435	440	445
320	Ser Gly Gly Ser Ser Ser Gly Ser Ser Ser Ser Ser Ser Ser Ser Ser		
321	450	455	460
324	Ser Ser Ser Ser Ser Ser Ser Ser Ser Pro Ser Ser Ser		
325	465	470	475
328	Ser Gly Gly Glu Ser Ser Glu Thr Ser Ser Asp Leu Phe Glu Gly Ser		
329	485	490	495
332	Asn Glu Gly Ser Ser Ser Ser Gly Ser Ser Gly Ala Arg Arg Glu Gly		
333	500	505	510
336	Arg His Arg Ala Pro Val Thr Phe Asp Glu Ser Gly Ser Leu Pro Phe		
337	515	520	525
340	Leu Ser Leu Ala Gln Phe Phe Leu Leu Asn Glu Asp Asp Asp Asp Gln		
341	530	535	540
344	Pro Arg Gly Leu Thr Lys Glu Gln Ile Asp Asn Leu Ala Met Arg Ser		
345	545	550	555
348	Phe Gly Glu Asn Asp Ala Leu Lys Thr Cys Ser Val Cys Ile Thr Glu		
349	565	570	575
352	Tyr Thr Glu Gly Asn Lys Leu Arg Lys Leu Pro Cys Ser His Glu Tyr		
353	580	585	590
356	His Val His Cys Ile Asp Arg Trp Leu Ser Glu Asn Ser Thr Cys Pro		
357	595	600	605
360	Ile Cys Arg Arg Ala Val Leu Ala Ser Gly Asn Arg Glu Ser Val Val		
361	610	615	620
364	<210> SEQ ID NO: 4		
365	<211> LENGTH: 281		

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Input Set : A:\PTO.SR.txt

Output Set: N:\CRF4\03252005\J528104.raw

366 <212> TYPE: PRT  
 367 <213> ORGANISM: homo sapiens  
 369 <400> SEQUENCE: 4  
 371 Met Ala Met Met Glu Val Gln Gly Gly Pro Ser Leu Gly Gln Thr Cys  
 372 1 5 10 15  
 375 Val Leu Ile Val Ile Phe Thr Val Leu Leu Gln Ser Leu Cys Val Ala  
 376 20 25 30  
 379 Val Thr Tyr Val Tyr Phe Thr Asn Glu Leu Lys Gln Met Gln Asp Lys  
 380 35 40 45  
 383 Tyr Ser Lys Ser Gly Ile Ala Cys Phe Leu Lys Glu Asp Asp Ser Tyr  
 384 50 55 60  
 387 Trp Asp Pro Asn Asp Glu Glu Ser Met Asn Ser Pro Cys Trp Gln Val  
 388 65 70 75 80  
 391 Lys Trp Gln Leu Arg Gln Leu Val Arg Lys Met Ile Leu Arg Thr Ser  
 392 85 90 95  
 395 Glu Glu Thr Ile Ser Thr Val Gln Glu Lys Gln Gln Asn Ile Ser Pro  
 396 100 105 110  
 399 Leu Val Arg Glu Arg Gly Pro Gln Arg Val Ala Ala His Ile Thr Gly  
 400 115 120 125  
 403 Thr Arg Gly Arg Ser Asn Thr Leu Ser Ser Pro Asn Ser Lys Asn Glu  
 404 130 135 140  
 407 Lys Ala Leu Gly Arg Lys Ile Asn Ser Trp Glu Ser Ser Arg Ser Gly  
 408 145 150 155 160  
 411 His Ser Phe Leu Ser Asn Leu His Leu Arg Asn Gly Glu Leu Val Ile  
 412 165 170 175  
 415 His Glu Lys Gly Phe Tyr Tyr Ile Tyr Ser Gln Thr Tyr Phe Arg Phe  
 416 180 185 190  
 419 Gln Glu Glu Ile Lys Glu Asn Thr Lys Asn Asp Lys Gln Met Val Gln  
 420 195 200 205  
 423 Tyr Ile Tyr Lys Tyr Thr Ser Tyr Pro Asp Pro Ile Leu Leu Met Lys  
 424 210 215 220  
 427 Ser Ala Arg Asn Ser Cys Trp Ser Lys Asp Ala Glu Tyr Gly Leu Tyr  
 428 225 230 235 240  
 431 Ser Ile Tyr Gln Gly Gly Ile Phe Glu Leu Lys Glu Asn Asp Arg Ile  
 432 245 250 255  
 435 Phe Val Ser Val Thr Asn Glu His Leu Ile Asp Met Asp His Glu Ala  
 436 260 265 270  
 439 Ser Phe Phe Gly Ala Phe Leu Val Gly  
 440 275 280  
 443 <210> SEQ ID NO: 5  
 444 <211> LENGTH: 1985  
 445 <212> TYPE: DNA  
 446 <213> ORGANISM: homo sapiens  
 448 <400> SEQUENCE: 5  
 449 cggcggagctt tcggcaccttc tgccgggtgg taccgaggct tccccggcgcc ccctcctctc 60  
 451 ctccccacccgg cctgcaccttc cccgcgggac tatgcccccc acgtttccct cagccctttt 120  
 453 ctctcccgcc cgagccgcgg cggcagcagc agcagcagca gcagcaggag gaggagcccg 180  
 455 gtggcggcgg tggccgggaa gccccatggcg tacagtcaag gaggcggcaa aaaaaaagtc 240  
 457 tgctactact acgacggta tattggaaat tattattatg gacagggtca tcccatgaag 300

**VERIFICATION SUMMARY**  
PATENT APPLICATION: US/10/528,104

DATE: 03/25/2005  
TIME: 09:22:36

Input Set : A:\PTO.SR.txt  
Output Set: N:\CRF4\03252005\J528104.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No  
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date